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EXAMINER

PHAM, HAI CHI

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,968	Applicant(s) YOSHIMURA ET AL.	
	Examiner Hai C. Pham	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 21-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Duplicate Claims

1. Claim 22 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 21. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). It is suggested to delete claim 22.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakane et al. (US 2005/0265211).

Regarding claim 1: Nakane et al. discloses an optical recording medium 100b and an optical disc apparatus, the optical recording medium comprising a data recording layer 105 which is provided to record contents data upon irradiation of an optical beam (Fig. 2) [0024], and a visual information recording layer 101 including a visual information recording area 101a provided for recording only visual information, which is visually recognizable, by irradiating the optical beam, i.e. by using the laser diode 79 (Figs. 1, 2 & 5) [0023], and a visual information management area (label side information recording band 102 depicted in Fig. 1 or label side information recording bands 105a & 105b depicted in Fig. 2), where first recording layer information is previously recorded so as to be readable (the label side information recording band 102 contains the printing information file previously recorded with respect to the visible image recorded in the label recording region 101a) [0020] [0021] [0050], wherein the visual information recording layer 101 is formed on a side opposite to the data recording layer 105 [0019], and the first recording layer information (i.e. printing information file) includes information indicating that the layer when the first recording layer exists is the visual information recording layer 101a (the printing information is recorded onto the label side information band 102 only during the printing of the visible image on the label recording layer 101, the optical pickup 65 is first instructed to move to the label side information recording band 102 to read the printing information, the existence of the content of which is indicative of the label recording region 101a is on the same side as that of the label side information recording band 102 and facing the optical pickup 65) [0048] [0050]-[0051] and at least one of visual information management information (i.e. printing information) indicative of presence or absence or record of visual information

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onto the visual information recording area (the printing information recorded in the label side information recording band 102 indicates that there is a visible image being recorded onto the label recording region 101a) [0020] and the area information indicative of the recordable area of the visual information on the visual information recording area 101a (the printing information recorded in the label side information recording band 102 includes a printed range of the visible image such that a new visible image can be recorded onto the empty space of the label recording region 101a) [0020] [0021] [0052].

Regarding claims 21 & 22: Nakane et al. further teaches the first recording layer information (printing information file) being regularly arranged in the visual information management area 102 (label side information recording band 102 is recorded with the printing information file indicating the printed range and the information of the visible image) [0020] [0021].

Regarding claim 23: Nakane et al. still further teaches any one of visual information management information indicating whether or not record of the visual information exists in the visual information recording area and area information indicative of a recordable area of the visual information is recorded in the visual information management area (the printing information file indicative of both the existence of a recorded visible image in the label recording region 101a and the printed range of the visible image is recorded in the label side information recording band 102) [0020] [0021].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24, 25, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. in view of Morishima et al. (US 7,082,094).

Regarding claim 24: Nakane discloses all the basic limitations of the claimed optical recording medium (please see paragraph 3 above) and further teaches the optical disc apparatus comprising an input device, i.e. host device 94, which inputs the visual information to be recorded (e.g., via the interface circuit 93) (Fig. 6) [0051], a pickup 65 which is used to record the visual information thus inputted, a visual-information dedicated drive signal generating device, i.e. laser control circuit 75, which generates a visual-information dedicated drive signal for driving the pickup in accordance with the visual information thus received [0039] [0045], a first detection device which detects the first recording layer information recorded in the visual information management area of the visual information recording layer (the CPU 90 controls the optical pickup 65 to move to the label side information recording band 102 to read the printing information) [0050], and the optical beam irradiates the visual information recording layer, the pickup records the visual information on the visual information recording layer in accordance with the visual information-dedicated drive signal [0113].

Although Nakane et al. teaches the optical pickup 65 reading the printing information recorded in the label side information recording band 102 and automatically goes on to print a new visible image on the same face of the optical disc, knowingly understood that the label side of the optical disc is facing the optical pickup 65, Nakane et al. however fails to explicitly teach the determining device which determines a side where the optical beam is irradiated on the optical recording medium in accordance with the result of the detection by the first detection device (claim 24), and the second determining device which determines, in accordance with a result of the detection obtained by the second detection device, whether or not it is possible to record visual information onto the optical recording medium, which is irradiated by the optical beam (claim 25).

Morishima et al. discloses an optical disc apparatus comprising an optical pickup 10 to detect the ATIP data so as to recognize the data recording side of the optical disc is actually facing the optical pickup 10, and the same optical pickup 10 to detect the data code for the disc ID recorded onto the label recording layer of the optical disc in order to determine that the label recording side of the optical disc is actually facing the optical pickup 10 (col. 18, lines 4-54).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Nakane et al. by incorporating the teaching of Morishima et al. in implementing the discrimination means for determining the proper label surface of the disc through reading the content of the image information area management in order to prevent incorrect printing of the visible image on the data recording layer and vice versa.

Regarding claims 29 & 30: Nakane et al. also fails to teach the pickup recording the visual information onto the optical recording medium by irradiating a laser beam on a side of the data recording layer of the optical recording medium.

Morishima et al. teaches the optical pickup 10 recording the visible image onto the visible image recording layer by irradiating the laser beam from either surface of the optical disc by properly adjusting the distance between the optical pickup 10 and the image/data recording layer of the optical disc (Figs. 26 & 28) (col. 27, line 58 to col. 28, line 47).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Nakane et al. so as to irradiate the laser beam data side of the optical disc to recording the visible image onto the image recording layer by providing the mechanism to move the optical pickup at the proper distance from the image/data recording layer to record the visible image or the data information into the proper recording layer as taught by Morishima et al. in order to record the visible image without having to flip the optical disc.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. in view of Morishima et al. as applied to claim 24 above, and further in view of Anderson et al. (US 6,778,205).

Nakane et al. in view of Morishima et al. discloses all the basic limitations of the claimed invention including a contents-data dedicated drive signal generating device that, when the contents data are inputted into the input device, generates a contents-

data dedicated drive signal for driving the pickup in accordance with the contents data thus inputted (Morishima et al., col. 13, lines 30-40).

Nakane et al. in view of Morishima et al. fails to teach the data recording pickup that is different from a visual-information recording pickup for recording the visual information and that records the contents data into the data recording layer in accordance with the contents-data dedicated drive signal.

Anderson et al. teaches an optical disc drive comprising a write laser head 108a to record data information on the data side optical disc 112 and a separate labeling write laser head 108b dedicated to write a visible image on the label side of the disc opposite to the data side such that the user is not required to flip the disc to record the label after the data recording on the opposite side of the disc is completed (Fig. 4), wherein the data write laser beam 402 and the labeling write laser beam 404 have different wavelength (col. 5, line 43 through col. 6, line 14).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Nakane et al. by incorporating a data recording pickup different from the visual-information recording pickup as taught by Anderson et al. such that the user does not have to flip the disc over for recording on the opposite face as it is required for the case of using a single head for recording both data and image information as suggested by Anderson et al.

7. Claims 27, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakane et al. in view of Morishima et al. and of Anderson et al. as applied to claim 26 above, and further in view of Eguchi et al. (US 5,473,154).

Nakane et al. in view of Morishima et al. and Anderson et al. discloses using separate optical pickups having laser light sources of different wavelengths to write data information and image information, respectively, of the opposite faces of the optical disc (Anderson et al., col. 5, line 43 through col. 6, line 14), but does not explicitly teach the visual information recording pickup having a numerical aperture (NA) lower than that of the data recording pickup (claim 27), and having a wavelength longer than that from the data recording pickup (claim 28).

Regardless, Anderson et al. does teach the labeling write laser beam 404 being significantly wider than the data write laser beam 402, the data recording having a higher density than it is required for labeling (col. 6, line 7-14). Eguchi et al. teaches that in order to obtain a data recording with higher density, it is necessary to shorten the wavelength of the laser beam and/or to increase the numerical aperture NA of the objective lens (col. 1, lines 17-27). In other words, visual information recording pickup having a numerical aperture (NA) lower than that of the data recording pickup, and having a wavelength longer than that from the data recording pickup.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Nakane et al. by incorporating the teaching of Eguchi et al. in providing a longer wavelength laser beam and a lower numerical aperture objective lens for the labeling write laser beam since the visible image writing does not required a high density recording as suggested by Eguchi et al.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 21-30 have been considered but are moot in view of the new grounds of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai C Pham/
Primary Examiner, Art Unit 2861
June 2, 2009